UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/826,811	04/06/2001	Stephen Gold	1509-165	6456

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IP Administration
C/o Hewlett-Packard Company
3404 East Harmony Road
Mailstop 35
Fort Collins, CO 80528-9599

EXAMINER
TO, BAOQUOC N

ART UNIT	PAPER NUMBER
2172	

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-20* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *2,3* .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1.   Claims 1-20 are presented for examination.

Information Disclosure Statement

2.   The information disclosure statement (IDS) submitted on 02/20/02 and 10/17/02.

The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the

information disclosure statement is being considered by the examiner.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3.   Claims 1-7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Saxon (US. Patent No. 5,758,359).

Regarding on claim 1, Saxon teaches a back up method for a plurality of

computers, said plurality of computers comprising:

A back up computer device (server), said back up computer device comprising a

data processor (CPU 22), a communication link for communicating with other said

computers, and a bulk data storage device (internal memory 24) for storing back up

data of said other computers (col. 3, lines 55-61);

A plurality of client computer, each said client computer comprising at least one

data processor, and a data storage device having a client data storage area, wherein

said back up computer operates to back up data stored in said client data storage areas

of each of said plurality of client computers (client/server in the network) (col. 3, lines

55-67), said method comprising the steps of:

Maintaining a list of files on a said client computer allocated for back up;

Maintaining a total size data describing a size of each said listed file;

Determining a total size data describing a total size of said listed files of said

client computer;

Saxon does not explicitly teaches comparing said total file size data with a pre-

determined size limit; and determining whether to back up said client files or not,

depending on a result of said comparison between said total file size data, and said

predetermined size limit. However, Saxon teaches, "the maximum size threshold

indicates a maximum size (i.e., quantity of data) that the save set at the schedule level

must not exceed. This parameter is chosen by the system administrator or user, who

determines that this is the maximum amount of data that ca be backed up in the allotted

back up time" (col. 7, lines 21-27). In addition, Saxon also teaches, "the total size is

compared to the maximum size threshold to determine if the total size is less than or

equal to the maximum size threshold 62. If the total size exceeds the threshold, the

method performs the steps of : I) determining if there is a next most recent save set 64;

ii) eliminating the most recent save set by subtracting the "new" save set size of the

most recent save set 68; iv) updating the current time stamp at step 60; and v)

comparing the resulting total size to the threshold. Step I-v are performed repeatedly

until there is no "next most recent save set" at step 64 or the resulting total size is less

than or equal to the threshold at step 62. If the threshold has not been reached and

there is no "next most recent save set" at step 64, then the method of the illustrated

embodiment terminates at step 70 since the method cannot stay within the maximum

size limits constraint and it is therefore likely that a backup operation could not be

performed in the allotted time" (col. 7, lines 48-66). This teaches the claimed limitations,

comparing the file size and determining to back up based on the comparison process. Therefore, it would have been obvious to one ordinary skill in the art at the time of the invention was made to include the comparison of file size and back up based on the comparison process as taught in Saxon would allow the system to allow only back up with only the file size that have been set.

Regarding on claim 2, Saxon teaches step of determining whether or not to back up said client data comprises:

Comparing said total file size data with a first file size limit (col. 7, lines 47-50);

If said total file size data exceeds said first file size limit, generating a warning message indicating said first file size limit is exceeded (col. 7, lines 50-57); and

Allowing back up of said data files within said file size limit (col. 7, lines 50-57).

Regarding on claim 3, Saxon teaches the step of determining whether or not to back up said client files comprises:

Comparing said total file size data with a second file size limit data (col. 7, lines 47-50);

If said total file size data exceeds said second file size limit, then prohibiting back up of said client files (col. 7, lines 50-57).

Regarding on claim 4, Saxon teaches step of determining whether or not to back

up said client files comprises:

Comparing said total size data with a second file size limit data (col. 7, lines 47-

50);

If said total file size data exceeds said second file size limit, then prohibiting back

up of said client files (col. 7, lines 60-66); and

Generating a warning message, that said second file size limit is exceeded (col.

7, lines 60-65).

Regarding on claim 5, Morris teaches the process of: maintaining a quota list,

listing a plurality of files stored in a backed up region of said client computer, wherein for

each said file, there is stored a size data describing a size of said file (col. 11, lines 1-2).

Regarding on claim 6, Morris teaches for a client computer, summing a total of all

said file sizes to obtain a total file size data of files stored in a backed up region of said

client computer (col. 11, lines 30-35).

Regarding on claim 7, Morris teaches for said client computer, storing a

difference list, listing differences between files backed up during a previous back up

process, and files currently stored in a back up data storage region of said client

computer (col. 12, lines 64-67).

Regarding on claim 9, Saxon teaches a method of operating a back up computer,

said back up computer comprising:

At least one data processor (CPU 22) (col. 3, lines 59-60);

A data storage device for storing a plurality of back up files (memory) (col. 3,

lines 60-61);

An interface device (communication interface) (col. 3, lines 57-59); and

A back up management application for managing storage of data in said data

storage device (col. 4, lines 16-19);

Said method comprising steps of:

Allocating a plurality of back up data storage areas, for storing data received from

each of a plurality of client computer (col. 5, lines 1-2);

Saxon does not explicitly teach receiving a total size data form each of a plurality

of client computers, each said total file size data representing a total file size at said

client computer of files backed up to said back up computer; and for each said client

computer, transmitting to said client computer a file size limit representing a limit of total

file size on each said client computer, for which back up of said files is permitted. Saxon

teaches, "the total size is compared to the maximum size threshold to determine if the

total size is less than or equal to the maximum size threshold 62. If the total size

exceeds the threshold, the method performs the steps of : I) determining if there is a

next most recent save set 64; ii) eliminating the most recent save set by subtracting the

"new" save set size of the most recent save set 68; iv) updating the current time stamp

at step 60; and v) comparing the resulting total size to the threshold. Step I-v are

performed repeatedly until there is no "next most recent save set" at step 64 or the

resulting total size is less than or equal to the threshold at step 62. If the threshold has

not been reached and there is no "next most recent save set" at step 64, then the

method of the illustrated embodiment terminates at step 70 since the method cannot

stay within the maximum size limits constraint and it is therefore likely that a backup

operation could not be performed in the allotted time" (col. 7, lines 48-66). This teaches

the file size is known and transmitted to the server before the comparison process.

Therefore, it would have been obvious to one ordinary skill in the art at the time of the

invention was made to include the transmitting of the a permitted file size to the server

in order to compare process in order to allow the system to back up with only the file

size that have been set.

4.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saxon

(US. Patent No. 5,758,359) in view of Cane et al. (5,765,173).

Regarding on claim 8, Cane teaches a method of storing back up data of a

plurality of client computers, on a back up computer, said method comprising the step

of: receiving a first file set from a first said client computer (col. 6, lines 57-58);

storing said first file set on said back up computer (col. 6, lines 58-59);

maintaining a database entry describing said first file set (list entries) (col. 6, lines

59-60);

receiving a second file set from a second said client computer (common file list)

(col. 6, line 62);

comparing said second file set of said second client computer with said first file

set of said first client computer (col. 6, lines 62-63);

for any files of said second file set which are identical to individual files of said

first file set, allocating in said database pointers to data locations of said common files

already stored (col. 6, liens 63-64); and

Saxon does not explicitly teach storing said files of said second file set which are

not identical to files of said first file set in said back up computer. Cane teaches, "the

candidate save list 810 and any files that are found are marked as being already

present on the backup system. Files not so marked are sent through the normal back

up process" (col. 6, lines 62-65). This teaches the comparing between the two files set

and sending the different file set to the back up process. Therefore, it would have been

obvious to one ordinary skill in the art at the time of the invention was made to combine

the teaching of Cane and Saxon because comparing the two set of files and send the

different to the backup system to backup.

5.   Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Morris (US. Patent No. 5,812,017) in view of Ault et al. (US. Patent No. 5,689,701).

Regarding on claim 10, Morris teaches a method of operating a client computer,

said client computer comprising:

At least one data processor (CPU processor) (col. 8, line 49);

A data storage device for storing client files, said data storage device having a

back-up data storage area from which files may be sent for back-up (col. 8, lines 49-50);

An interface device (col. 8, lines 55-60); and

said method comprising the steps of:

Creating a list of files resident in said back-up data storage area (col. 10, lines

39-41); .

For each said file on said list, storing a size data describing a size of said client

file (col. 11, lines 1-2);

Morris does not explicitly teach summing said plurality of file sizes to obtain a

summed file size total; and comparing said summed file size total with a size quota limit.

Ault teaches, "a file may have examine, add, and replaces Eas at any time. A file may

have any numbers of Eas, as illustrated in FIG. 9. In the OS/2 implementation of Eas,

each EA may be up to 64 KB in size, and the sum of all Eas for a file must exceed 64

KB" (col. 10, lines 37-41). This teaches the file is summed up before back up to a

certain limit before it backs up. Therefore, it would have been obvious to one ordinary

skill in the art at the time of the invention was made to combine the teaching of Morris

and Ault because summing up the file and comparing the file to the size limit would allow the client computer to know if the file size limit is met the criteria for backing it up.

Regarding on claim 11, Morris teaches size quota limit comprises a first size limit (col. 7, lines 60-65); and

said method further comprises the step of, if said summed total file size data exceeds said size quota list, generating a warning message at said client computer, warning that said first quota limit is exceeded (col. 7, lines 60-65).

Regarding on claim 12, Morris teaches size quota limit comprises a second quota limit (col. 7, lines 60-65); and said method further comprises the step of:

If said summed file size data is greater than said second quota limit data, prohibiting back-up of at least one file is said client backed-up data storage area (col. 7, lines 60-65).

Regarding on claim 13, Morris teaches comprising the processes of:

Comparing the list of said current files on said client back-up data storage area with a previously generated list of files representing a status of files in said back-up client area at a previous time (col. 11, lines 54-60); and

Identifying files which have changed between said current file list and said previous files list (col. 11, lines 54-60);

Generating a difference list listing said files that have changed between said

current file list and said previous file list (col. 12, lines 65-67).

6.   Claims 10-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Morris (US. Patent No. 5,812,017) in view of Saxon (US. Patent No. 5,758,359).

Regarding on claim 14, Morris teaches client computer comprising:

A data processor (CPU processor) (col. 8, line 49);

A data storage device having a data storage area reserved for files which are

subject to a back-up process (col. 8, lines 49-50);

In interface device (communication interface) (col. 8, lines 55-60); and

A back-up management agent which operates to manage back-up of files in said

backed-up data storage area by sending said files via said interface device (network

interface) (col. 8, lines 55-60). Morris does not explicitly teach client management agent

operates to receive a first quota limit from an external source, said first quota limit

describing an amount of data storage capacity which said client computer is permitted

to maintain in said backed-up data storage area. However, Saxon teaches, "the server

12 is a "back-up" server, the master catalog information includes the following: the back-

up directory structure; names, sizes, and attributes of directories for files that are

selected for backup; total number of files backed up in a save set; total size of the save

set; and backup data or data the save set was made" (col. 4, lines 50-57). This teaches

the server receive the permitted file size to be back up from the client. This also means

the client also have preset file size to send to the server for backup. Therefore, it would

have been obvious to one ordinary skill in the art at the time of the invention was made

to combine the teaching of Morris and Saxon because allowing the client to have the

size limit to store the document would allow the file size to be sent to the backed up

server to back up data.

Regarding on claim 15, Morris teaches client management agent operates to

receive a second quota limit from an external source, said second quota limit describing

an amount of data storage capacity which said client computer is permitted to maintain

in said backed-up data storage area (col. 10. lines 60-65).

Regarding on claim 16, Morris teaches client management agent operates to:

Maintain a quota list, describing an amount of data allowed to be stored in said

backed-up data storage area (col. 11, lines 1-2);

A file list describing one or more files currently stored in said backed-up data out

by said client management agent (col. 11, lines 2-3); and

A previous file list, describing a plurality of files previously stored in said backed-

up data storage area immediately prior to a last back-up operation carried out by said

client management agent (col. 11, lines 4-5); and

A difference list storing data describing difference between files on said new file

list, and files on said previous file list (col. 11, lines 10-15).

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Saxon (US. Patent No. 5,758,359) and in view of Chow et al. (US. Patent No. 6,029,175).

Regarding on claim 17, Saxon teaches a method of performing back-up of data on a back-up computer, said method comprising the steps of:

Each time a back-up operation of said client computer is initiated, determining a total size of all size of all files of said client computer to be backed up (col. 7, lines 45-50), and determining whether performance of said back-up would cause a first predetermined quota limit to be exceeded (col. 7, lines 45-50);

Determining if performance of said back-up would cause a second predetermined quota limit to be exceeded (col. 7, lines 55-60);

If it is determining that performance of said back up would cause said first predetermined quota limit to be exceeded, but said second predetermined quota limit not be exceeded, then proceeding with said back-up, and generating a warning signal warning that said first predetermining quota limit is exceeded (col. 7, lines 55-60); and

If performance of said back-up would exceed said second predetermined quota limit, then prohibiting said back-up (col. 7, lines 60-65).

Saxon does not explicitly teach generating a warning signal that said second predetermined quota limit would be exceeded. However, Chow teaches, "one of these background processes is to notify any clients that are interested in the fact that changes might not be made to an object within a certain threshold time-limit" (col. 34, lines 38-41). This teaches the notification when the limit is exceeded. Therefore, it would have

been obvious to one ordinary skill in the art at the time of the invention was made to

combine the teaching Chow and Saxon because employing the notification of exceeding

limit method would allow the system to notify the user to correct the occurred problem.

8.   Claims 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Morris (US. Patent No. 5,813,017) and in view of Rao et al. (US. Patent No.

5,689,706).

Regarding on claim 18, Morris teaches a method of operating a client computer,

said client computer comprising:

A data storage device for storing client files, said data storage device having a

back-up data storage area from which files may be sent for back-up (col. 10, lines 60-

62); and

A back-up management agent for managing back-up of data from said backed-

up data storage area (back up server 25) (col. 10, lines 55-58);

Said method comprising the steps of:

Maintaining a quota list, said quota list comprising a list of files in said back-up

area, which were back up during a previous back-up operation (col. 10, lines 60-64);

Performing a back-up operation on said files stored in said backed up data

storage area (col. 11, lines 1-7);

Morris does not explicitly teach after said back-up operation, modifying said copy

quota list to list a plurality of files actually backed up by said back-up operation. Rao

teaches, "updates to the master list file are made to the update file and a sort-merge

operation is periodically performed on the update file and the master list file to produce

a new master list file" (col. 23, lines 12-15). This teaches update the master list.

Therefore, it would have been obvious to one ordinary skill in the art at the time of the

invention was made to combine the teaching of Morris and Rao because updating the master list after back up would allow the system to keep the most current file.

Regarding on claim 19, Morris teaches producing a modified quota list to comprising a list of files currently in said baked up data storage area (col. 11, lines 30-33); and

Determining from said modified quota list, whether performance of a back up operation is within a quota limit (col. 11, lines 35-40).

Regarding on claim 20, Morris teaches step of producing a modified quota list comprises:

Generating a difference list, said difference list listing details of files which are difference between a current content of said backed up data storage area, and said quota list (col. 12, lines 60-67).

Conclusion

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Baoquoc N. To whose telephone number is (703) 305-1949 or via e-mail BaoquocN.To@uspto.gov. The examiner can normally be reached on Monday-Friday: 8:00 AM – 4:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y. Vu can be reached at (703) 305-4393.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

The fax numbers for the organization where this application or proceeding is assigned are as follow:
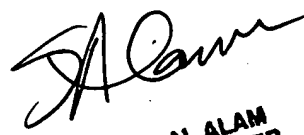
The fax numbers for the organization where this application or proceeding is assigned are as follow:

- (703) 746-7238   [After Final Communication}]
- (703) 746-7239   [Official Communication]
- (703) 746-7240   [Non-Official Communication]

Hand-delivered responses should be brought to:

Crystal Park II

2121 Crystal Drive

Arlington, VA 22202

Fourth Floor (Receptionist).

Baoquoc N. To
April 16, 2003

SHAHID AL ALAM
PATENT EXAMINER